North Dakota Department of Health
July – August 2003

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HIV/AIDS in North Dakota – Mid-year Update

Ten cases of HIV/AIDS were reported during the first six months of 2003. Five of the reported cases were newly diagnosed HIV infections; three of these cases also met the case definition of AIDS at the time of diagnosis.

The ages of the newly diagnosed HIV infections ranged from 36 to 53 years, with a mean of 43.6. All were male and white. Primary risk factors for transmission in descending frequency included male-to-male sexual contact, injecting drug use and recipient of a transfusion/transplant prior to 1985.

For comparison, during the first six months of 2002, 10 cases of HIV/AIDS were reported; eight of these were newly diagnosed HIV infections. There were no newly diagnosed cases of AIDS during this time period.

Of the newly diagnosed HIV infections in 2002, ages ranged from 18 to 52, with a mean of 32.5. Six were male and two were female. Five were white, two were American Indian and one was black. Primary risk factors for transmission in descending frequency included male-to-male sexual contact, heterosexual contact with a person at risk and injecting drug use.

Cumulative HIV/AIDS Cases, North Dakota

North Dakota has monitored HIV/AIDS cases since 1984. The reported infections include cases that were newly diagnosed in the state, as well as cases that were diagnosed elsewhere and moved to North Dakota.

Through June 30, 2003, 312 HIV/AIDS cases have been reported in North Dakota. Of the reported cases, 56 percent (176/312) are known to have been diagnosed as AIDS, and 38 percent (117/312) are known to have died.

Of the 312 reported HIV/AIDS cases:

- Gender: male (85%), female (15%)
- Predominant risk factor identified: male-to-male sexual contact (52%)
- Predominant age group: 20-39 years (71%)
- Race/Ethnicity: white (80%), American Indian (11%), black (7%), Hispanic (3%) and Asian/Pacific Islander (0.3%)

Please note that caution is recommended when interpreting these data due to low numbers.

North Dakota Influenza Season 2002-2003

Influenza is a major cause of illness and death in the United States. Each year 114,000 hospitalizations and 36,000 influenza-related deaths occur. Epidemics of influenza generally occur during the winter months and peak anywhere from late December through March. In North Dakota, nearly 500 deaths were attributed to influenza and/or pneumonia during the 2002-2003 influenza season.

During the 2002-2003 influenza season, a total of 652 laboratory-confirmed influenza cases were reported by viral culture, DFA, IFA or other rapid-test methods (Figure 1). Of the reported laboratory-confirmed cases, 224 were influenza A, 70 were influenza B and 358 were not typed.

The 2001-2002 influenza season peaked the third week of February, with another peak (predominantly due to influenza B) the second week of May. The 2002-2003 influenza season peak occurred late in the season again, peaking the first week of April.

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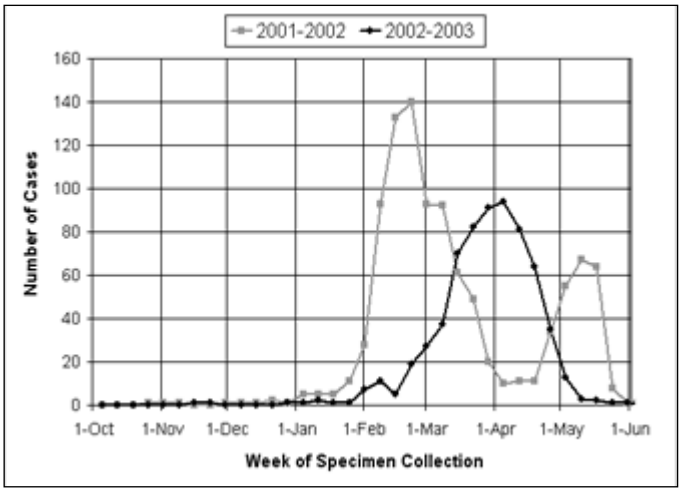
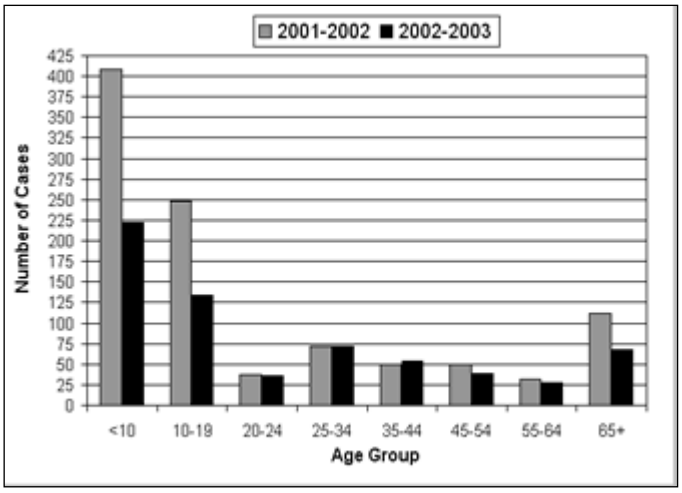
Figure 1.
Number of Reported Influenza Cases*
2001-20002 and 2002-2003 Influenza Seasons
North Dakota



*Positive cultures, DFA, IFA or other rapid tests.

Influenza morbidity during both the 2001-2002 and 2002-2003 seasons was highest in adolescents and infants: 356 (55%) were 19 years or younger, 227 (35%) were between 20 to 64 years and 68 (10%) were 65 years and older. (Figure 2).

Figure 2.
Number of Reported influenza Cases by Age Group*
2001-2002 and 2002-2003 Influenza Seasons
North Dakota

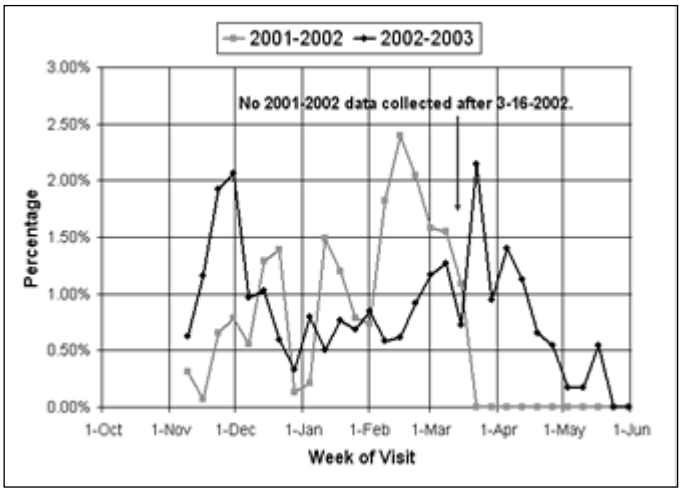


*Positive cultures, DFA, IFA or other rapid tests.

Sixteen private healthcare providers/clinics located throughout the state also submitted influenza–like illness data to the NDDoH as part of the sentinel provider program (Figure 3). Reports of influenza-like illnesses are similar to the laboratory-confirmed results. The greatest number of people with influenza-like illness presented to the doctor's office during the third week of March.

Data provided by the 16 sentinel providers indicate that most of the patients seen in their clinics with influenza-like illness were between the ages of 5 and 24.

Figure 3.
Percentage of Visits Due to Influenza-like Illnesses*
2001-2002 and 2002-2003 Influenza Seasons
North Dakota Sentinel Physician Surveillance Program



*Influenza-like illness is defined as fever of > 100 ºF with cough and/or sore throat.

Other surveillance activities also included monitoring numbers of culture-confirmed influenza cases and influenza-like illness in long-term care facilities. During the 2002-2003 influenza season, 10 culture-confirmed cases of influenza (three influenza A; one-H1N1, one-H3N2, one-unspecified and seven influenza B) and seven reports of influenza-like illness were reported from long-term care facilities. Nine selected schools in North Dakota located in Fargo, Bismarck, Dickinson, Rugby, Grand Forks, Minot, Jamestown and Williston also reported percentages of student absenteeism to the NDDoH during the 2002-2003 influenza season. School absenteeism (due to illness) ranged from 5 percent to 20 percent, peaking at 20 percent in late February.

October is the month recommended to conduct annual influenza vaccination campaigns. The trivalent influenza vaccine for the 2003-2004 season contains the same A subtype antigens and type B component as last year's vaccine. These include A/New Caledonia/20/99-like (H1N1), A/Moscow/10/99-like (H3N2) and B/Hong Kong/330/2001-like viruses. These viruses were chosen because of their growth properties and because they are representative of currently circulating A (H3N2) and B viruses.

Did you know?
North Dakota-specific information on influenza surveillance is available at **www.ndflu.com**.

2003-2004 Influenza Season

During the 2003-2004 influenza season, the North Dakota Department of Health again will be recruiting sentinel providers, sentinel schools and working with long-term care facilities for the reporting of influenza-like illness outbreaks in their facilities.

The North Dakota Department of Health is coordinating with the North Dakota Public Health Association, North Dakota Pharmaceutical Association, AARP ND, North Dakota Human Services —Aging Services Division, North Dakota Medical Association and North Dakota Health Care Review Inc. and will be providing free influenza posters, brochures, stickers and fact sheets. New this season is a poster that targets children for influenza vaccinations along with adhesive bandages stating "I got my flu shot."

Questions and Answers About FluMist™

What is FluMist? FluMist is a live vaccine sprayed into the nose to prevent influenza. It is different from the flu shot, which is an inactivated influenza virus vaccine given as an infection or "shot."

Who can receive FluMist? FluMist can be used to prevent disease caused by influenza A and B viruses in:

- Healthy children ages 5 to 17.
- Healthy adults ages 18 to 49.

FluMist should not be used by people who are younger than 5 or 50 and older. In addition, FluMist should not be used to treat influenza or to protect against other diseases.

Who else should not use FluMist?

- People who are allergic to any component of FluMist, including eggs or egg products.
- Children ages 5 to 17 who receive aspirin therapy or aspirin-containing therapy.
- Individuals who have a history of Guillain-Barre' syndrome.
- People with known or suspected immune deficiency diseases such as combined immunodeficiency, agammaglobulinemia and thymic abnormalities, as well as conditions such as HIV infection, malignancy, leukemia or lymphoma.
- Individuals who may be immunosuppressed or have altered or compromised status as a consequence of treatment with systemic corticosteroids, alkylating drugs, antimetabolites, radiation or other immunosuppressive therapies.
- People who have a history of asthma or reactive airway disease.
- Individuals who have chronic disorders of the cardiovascular and pulmonary system; pregnant women; and individuals with diabetes, kidney disorders or any other chronic health problem.

How many doses do I need, and do I need it every year? Children ages 5 to 8 who have not received FluMist before will need **two doses separated by at least six weeks**. Everyone else should receive only one dose. FluMist, like the flu shot, must be given every year to provide protection from the influenza virus.

Are there side effects of FluMist? Side effects can include headache, runny nose/nasal congestion and cough.

What else should I know about FluMist?

- FluMist should be used with caution by nursing mothers.
- FluMist cannot be administered with other vaccines.
- After FluMist administration, the influenza virus can be shed in nasal secretions. As a result, it should not be used by people in households where contacts are immunosuppressed.

Where can I get FluMist? FluMist is available through your physician and some local public health units.

Will my insurance cover the cost of FluMist? Contact your insurance company. Currently, Blue Cross Blue Shield of North Dakota does **not** include coverage for FluMist.

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Did you know??
Healthcare providers now can send disease report cards to the NDDoH via the internet at **www.health.state.nd.us/disease/DiseaseCard.htm**. Call Erin Fox at 701.328.3341 or Julie Goplin at 701.328.2375 if you have any questions about the new system. The NDDoH still accepts alternative reporting methods such as paper report card, fax, etc.

Sentinel Providers Needed

The North Dakota Department of Health, in collaboration with the Centers for Disease Control and Prevention, is looking for influenza sentinel providers to conduct surveillance for influenza-like illness (ILI) this upcoming flu season. Providers of any specialty (e.g., family physicians, internists, pediatricians, physician assistants, nurse practitioners, registered nurses) in any type of practice (e.g., private practice, public health clinic, urgent care center, emergency room, student health center) are eligible to be influenza sentinel providers.

Who: Influenza Sentinel Provider

Why: Monitor the impact of influenza in your community and state

When: October 2003 through May 2004

What:

- Influenza-like illness: fever (≥100°F) AND cough or sore throat
- Most physicians report that it takes them less than 30 minutes a week to compile and report their data.
- Sentinel providers can submit specimens from a subset of patients for virus isolation and DFA free of charge.

For more information: Contact Melissa Casteel, influenza surveillance coordinator at 800.472.2180 or mcasteel@state.nd.us

Summary of Selected Reportable Conditions					
North Dakota, 2002-2003					
Reportable Condition	**July-August 2003***	**Jan-August 2003***		**July-August 2002**	**Jan-August 2002**
Campylobacteriosis	11	61		24	56
Chlamydia	266	1081		187	824
Cryptosporidiosis	3	12		15	27
E. coli, shiga toxin positive (non-O157)	3	9		1	2
E. coli O157:H7	3	8		5	16
Enterococcus, Vancomycin-resistant (VRE)	1	10		0	0
Giardiasis	6	28		14	31
Gonorrhea	11	59		18	51
Haemophilus influenzae (invasive)	0	2		0	4
Hepatitis A	0	0		0	3
Hepatitis B	1	1		0	6
HIV/AIDS	6	16		6	16
Legionellosis	0	1		0	0
Lyme Disease	0	0		1	1
Malaria[1]	1	1		0	1
Meningitis, bacterial[2] (non meningococcal)	0	2		0	1
Meningococcal disease	0	3		0	3
Pertussis	1	4		1	7
Q fever	0	1		0	0
Rabies (animal)	9	46		9	42
Salmonellosis	5	27		7	37
Shigellosis	0	6		2	20
Staphylococcus aureus, Methicillin-resistant (MRSA)[3,4]	156	810		96	186
Streptococcal disease, Group A[5] (invasive)	2	13		0	3
Streptococcal disease, Group B[5] (infant < 3 months of age)	0	2		0	0
Streptococcal disease, Group B[5] (invasive[6])	6	20		0	6
Streptococcal disease, other[5,7] (invasive)	3	4		0	0
Streptococcal pneumoniae[5], (invasive, children < 5 years of age)	0	4		0	3
Streptococcal pneumoniae[5] (invasive[8])	2	35		0	26
Streptococcus pneumoniae[5], drug resistant	0	3		0	1
Tuberculosis	0	2		0	6
West Nile Virus Infection[9]	132	134		7	7

*Provisional data

[1] *Plasmodium falciparum*, foreign travel

[2] Meningitis caused by *Staphylococcus aureus* and *Streptococcus pneumoniae.*

[3] 2003 year-to-date data includes MRSA isolated from all sites.

[4] 2002 year-to-date data includes invasive sites only.

[5] Includes invasive infections caused by streptococcal disease not including those classified as meningitis.

[6] Includes invasive infections of streptococcal, Group B, disease in persons ≥ 3 months of age.

[7] Group G (3); serotype unknown (1)

[8] Includes invasive infections caused by *Streptococcus pneumoniae* in persons ≥ 5 years of age.

[9] West Nile Virus Encephalitis year-to-date 2003 (5); 2002 (2)